Editorial

EVIDENCE BASED MEDICINE: TRANSFORMING RESEARCH INTO PRACTICE!

Waris Qidwai

"Evidence based medicine", is a term coined by a group of clinicians and epidemiologists in early 1990s, but the origins of its philosophy date back to mid-19th century and earlier[1]. It is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients[2]. It is the ability to track down, critically appraise and incorporate evidence into clinical practice[3].

Initially, it was the lack of readily available meta-analyses on key clinical issues that hindered the practice of evidence based medicine. The busy clinician did not have the time to gather all the information available on a given topic, nor the skills to critically analyze the data. Today, the evidence based medical practice has become more feasible with the easy availability of evidence based guidelines[4].

The idea of evidence based medicine has received an overwhelming positive response from the academic and research community while a suspicious and a much more guarded reaction from those practicing medicine on the ground[4]. It is for this reason that the appropriate place for evidence based medicine in clinical practice is still being debated[5]. In order to appreciate the value of evidence based medicine in the era of present day medical practice, we need to understand its strengths as well as its limitations.

There is an unanimous consensus that using evidence base for medical practice is the only way to close the gulf between good clinical research and clinical practice[6]. We can no longer afford to practice medicine today based solely on physician experience or patient preference, unless evidence base is also incorporated.

The practice of evidence based medicine has a number of limitations which must also be considered. It needs to be appreciated that even though current clinical practice is often evidence based[7], new evidence finds place in clinical practice after a long waiting while previous practice not evidence based stays on for a long time[8].

The validity of evidence is often open to question. Older patients and women are under represented in clinical trials[9]. Evidence from trials on referred patients cannot be applied in primary care practice[10].

Information in "Evidence-Based Practice" usually filters through the opinions of experts and journal editors, making the use of the term "Opinion-Based Medicine" more appropriate[10]. Evidence for the best medical practice is often not available, limiting the practice of those who support it[11].

It is for these reasons that evidence-based practice requires not only clinical expertise and the judicious application of the best available evidence but also common sense and an understanding of the circumstances and values of the patient[12].

As a result there are calls to revise the "Evidence Based Medical practice model", wherein greater emphasis is placed on clinical expertise and patient preferences, both of which remain powerful influences on physician behaviour[13].

Enforcement of evidence based medical practice in Pakistan requires local data on different diseases and their treatment. Serum cholesterol levels considered appropriate in the west may not be so for the Pakistani population. The issues concerning diseases such as tuberculosis and enteric fever and their management requires local trials and evidence. The development of local data base on common medical problems and evidence gathered locally on common medical problems is mandatory for our practitioners to practice evidence based medicine.

Modern medical practitioner is expected to ensure that patients receive treatment in line with the best available evidence. In addition, patient preferences and physician experiences should also be part of medical practice. After all, the practice of medicine is a science as well as an art[14]!

REFERENCES

1. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. BMJ 1996 13;312 (7023):71-2
2. Sackett DL. Evidence-based medicine. Semin Perinatol 1997 Feb;21(1):3-5
3. Rosenberg WM, Sackett DL. On the need for evidence-based medicine. Therapie 1996;51 (3):212-7
4. White B. Making evidence-based medicine doable in everyday practice. Fam Pract Manag 2004;11(2):51-8
5. Isaacs D, Fitzgerald D. Seven alternatives to evidence based medicine. BMJ 1999;319 (7225):1618
6. Rosenberg W, Donald A. Evidence based medicine: an approach to clinical problem-solving.

BMJ 1995;310(6987):1122-6
7. Gill P, Dowell AC, Neal RD, Smith N, Heywood P, Wilson AE. Evidence-based general practice: a retrospective study of interventions in one training practice. BMJ 1996;312:819-21
8. Martensen RL. The effect of medical conservatism on the acceptance of important medical discoveries. JAMA 1996;276:1933
9. Gurwitz JH, Col NF, Avorn J. The exclusion of the elderly and women from clinical trials in acute myocardial infarction. JAMA 1992;268:1417-22
10. Knottnerus JA. Medical decision making by general practitioners and specialists. Fam Pract 1991;8:305-7
11. Hampton JR. Evidence-based medicine, opinion-based medicine, and real- world medicine. Perspect Biol Med 2002;45:549-68.
12. Montori VM, Guyatt GH. What is evidence-based medicine? Endocrinol Metab Clin North Am 2002;31(3):521-6
13. Tracy CS, Dantas GC, Upshur RE. Evidence-based medicine in primary care: qualitative study of family physicians. BMC Fam Pract. 2003;4(1):6
14. Qidwai W. The art of practicing scientific medicine. J Coll Physicians Surg Pak 2003;13 (8):491-2.

AUTHOR AFFILIATION AND CORRESPONDENCE ADDRESS:

Dr. Waris Qidwai
Associate Professor, Department of Family Medicine The Aga Khan University
Stadium Road, P.O. Box: 3500 – Karachi 74800, Pakistan. Fax: (9221) 493-4294, 493-2095.
Telephone: (9221) 48594842/ 4930051 Ext. 4842 E-mail: waris@akunet.org